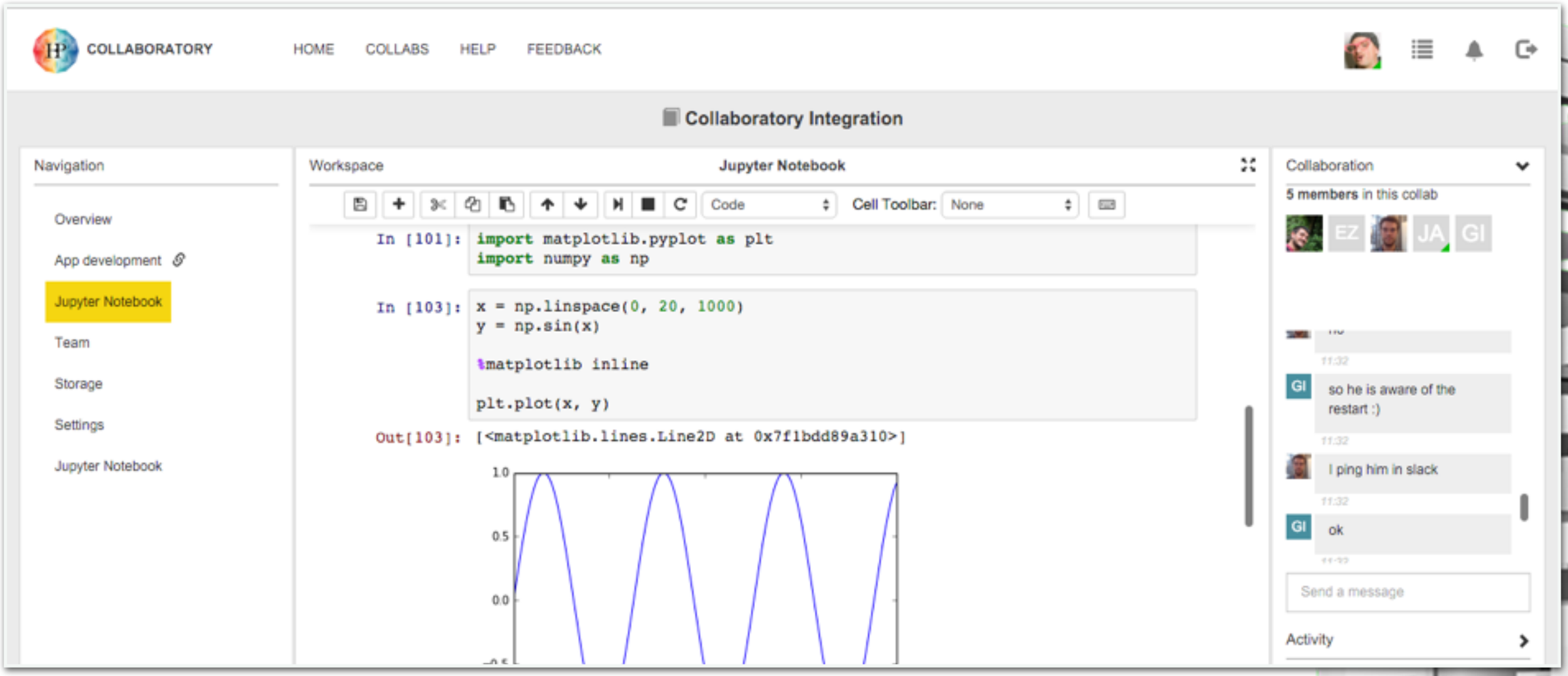
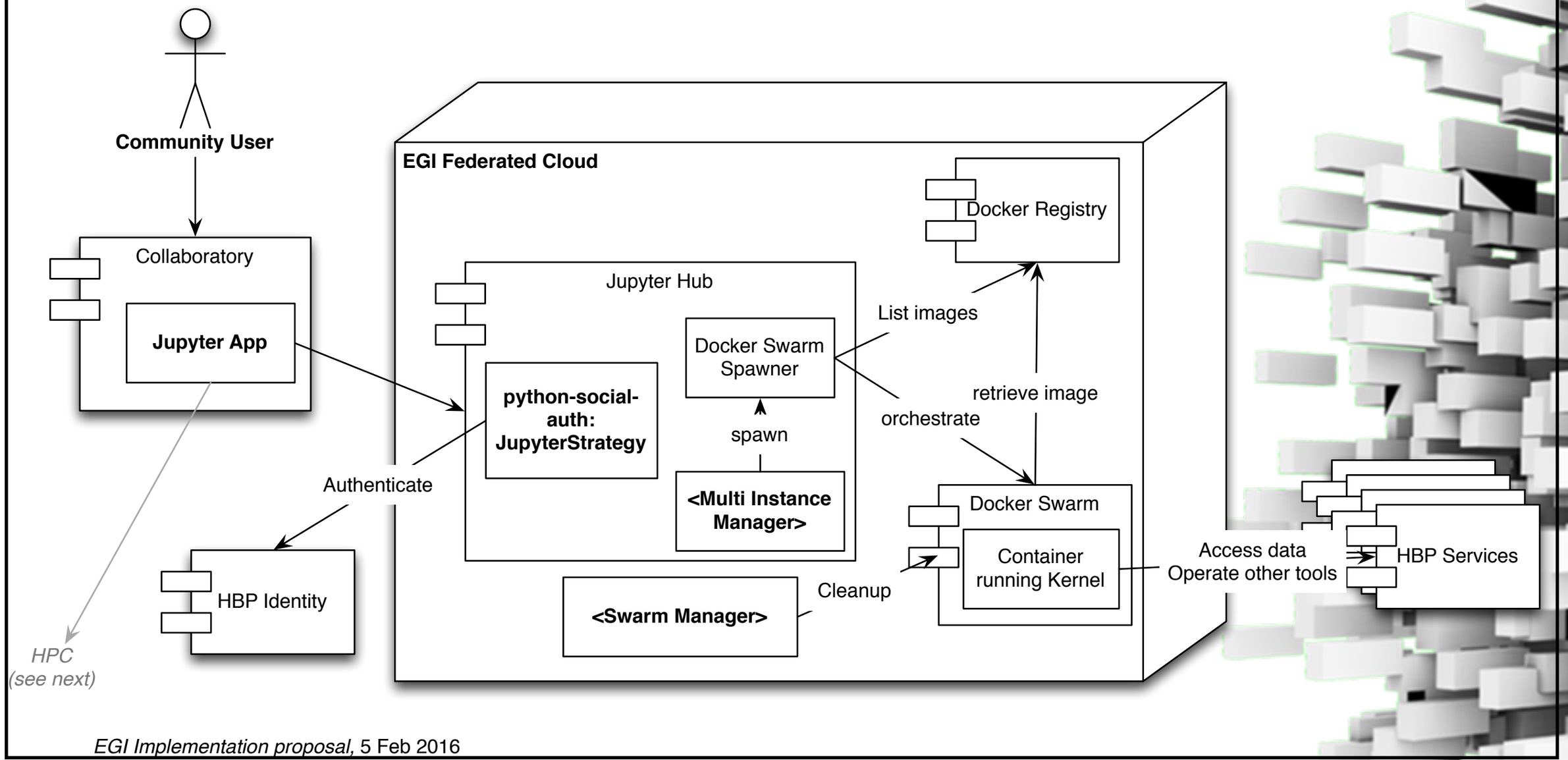


HBP Collaboratory

Jupyter Notebook integration plan

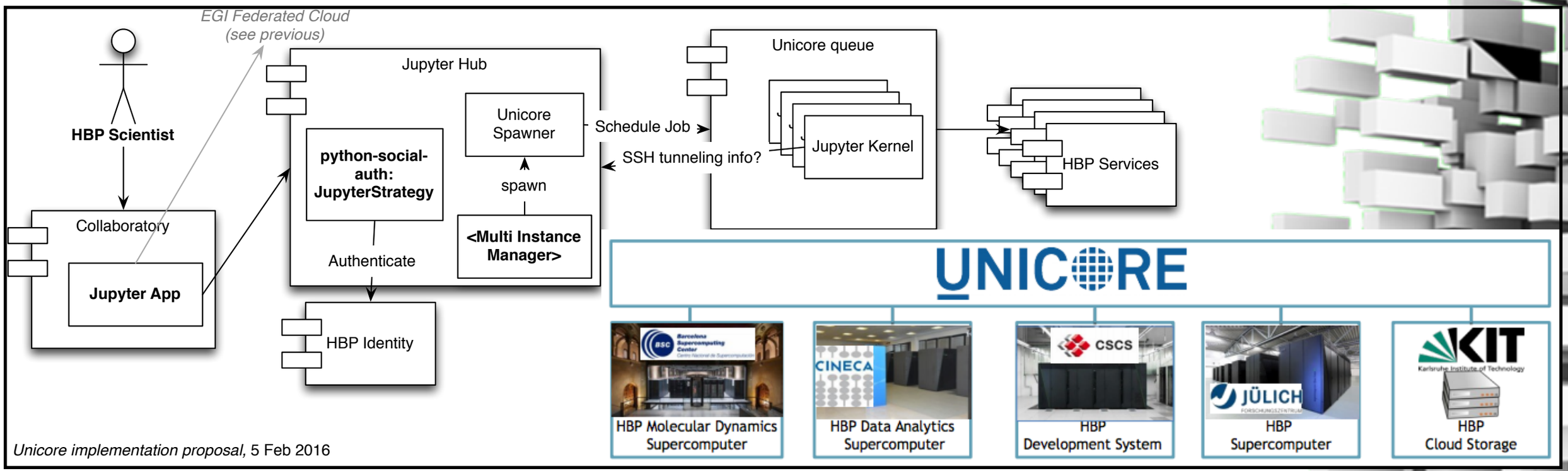
Olivier Amblet <olivier.amblet@epfl.ch>
5 Feb 2016



EGI Implementation proposal, 5 Feb 2016

Deployment in EGI Federated Cloud

500+ Community Users with standard requirements
Access to HBP tools and data through web services on distant sites
Slow but good horizontal scaling



Unicore implementation proposal, 5 Feb 2016

Deployment in HPC Center

10-50 scientists per HPC project
Access to HPC resources through unicore
Huge per user scaling, fast access to file but complex environment

Links

- Custom spawner and possible architecture ideas:
  - A valid architecture schema, using docker swarm (https://twitter.com/rgbkrk/status/618818742881890304)
  - RemoteSpawner (HPC use case, using): http://zonca.github.io/2015/04/jupyterhub-hpc.html (just don't use the irrelevant link to tmpnb.org as this is not using JupyterHub anymore)
- Running Jupyter *Notebook* in HPC centre (this details manual process that we might automate):
  - IPython/Jupyter notebook setup on SDSC Comet: http://zonca.github.io/2015/09/ipython-jupyter-notebook-sdsc-comet.html
  - Short version (probably too short): https://github.com/tnarihi/wiki/wiki/Jupyter-notebook-on-TTIC-clusters